EXECUTIVE SUMMARY

The staffs of the Federal Bureau of Land Management (BLM) and the California State Lands Commission (CSLC) have jointly prepared this Environmental Impact Report/Environmental Assessment (EIR/EA) for the El Paso Line 1903 Conversion Project, as proposed by the El Paso Natural Gas Company, in accordance with the California Environmental Quality Act (CEQA) and the National Environmental Policy Act (NEPA). This EIR/EA is meant to inform the public and permitting agencies about the potential adverse and beneficial environmental impacts of the proposed Project and its alternatives. Additionally, mitigation measures are recommended that would reduce any significant adverse impacts associated with the Project to the maximum extent possible and, where feasible, to a less-than-significant level.

The CSLC is the State Lead Agency for CEQA compliance in the preparation of this EIR/EA, while BLM is the Federal Lead Agency for NEPA compliance. The Federal Energy Regulatory Commission (FERC) is a Cooperating Agency.

El Paso Natural Gas Company (EPNG or "the Applicant") proposes the El Paso Line 1903 Conversion Project (referred to as "the Project") to convert an approximately 304-mile segment of the existing All American Pipeline, a crude oil pipeline, to natural gas service. EPNG currently owns the portion of the All American Pipeline that extends from McCamey, Texas to Wheeler Ridge, California. The approximately 784-mile portion of the pipeline from McCamey to Ehrenberg, Arizona (near the California/Arizona border) is referred to as EPNG Line 2000 (Line 2000), and the approximately 304-mile portion of the pipeline from Ehrenberg to Wheeler Ridge, California is referred to as EPNG Line 1903 (the Project). EPNG proposes to connect Line 1903 with the Southern California Gas Company's (SoCalGas's) system at Wheeler Ridge, the existing EPNG-owned Mojave Pipeline at Amboy, the Mojave/Kern Common Facilities at Daggett, and EPNG's system at Ehrenberg. A 6.4-mile expansion of the pipeline system at the Cadiz Pump Station is also proposed to provide an alternate location for Line 1903 to connect with the Mojave Pipeline.

ES.1.1 PROJECT OBJECTIVES, PURPOSE, AND NEED

EPNG states that the Project, if integrated with its existing system, would provide EPNG with an enhanced west-end system to both supply and market locations, and would

provide enhanced operational flexibility for shippers using the EPNG system. More specifically, conversion of Line 1903 would provide EPNG with additional interconnect capacity between its northern and southern systems. It also would provide access for EPNG customers to Rocky Mountain gas supplies from the Kern River Gas Transmission Company (Kern River) at Daggett, California.

EPNG's north system originates in the San Juan basin in northwest New Mexico and extends across northern Arizona to Topock, where it interconnects with EPNG's Mojave Pipeline operating system. EPNG's south system originates in the Permian basin in west Texas and extends across southern New Mexico and southern Arizona to Ehrenberg, Arizona, located on the Colorado River. EPNG currently has two cross-over lines in western Arizona that connect its north and south systems. Additionally, EPNG currently has connections with the North Baja Pipeline at Ehrenberg via Line 2000 and the Kern River Pipeline via the Mojave Pipeline. Line 1903 would become a new cross-over line located at the western end of EPNG's system. This western end location would enable EPNG to move gas between Topock, Arizona and Ehrenberg, Arizona delivery points on a firm basis for its California customers without the need to expand EPNG's north or south mainline systems (Figure 1.1-1).

Based on these circumstances, EPNG believes its customers would be best served by converting the remainder of the former All American crude oil pipeline system to natural gas use. EPNG intends to operate the line as a bi-directional gas transmission pipeline without additional compression, physically integrated as an extension of EPNG's existing south system pipelines. As such, EPNG could provide additional gas volumes westward to California markets, and provide gas eastward from Daggett to the California/Arizona border in order to serve customers in California, Arizona, and Mexico. EPNG states that the Project would benefit gas-fired power plants, local distribution companies in California and other states, and consumers of gas and electricity. While no new markets or supplies for gas would be accessed by the Project, Line 1903 would greatly enhance the flexibility and efficiency of the EPNG system.

The California Environmental Quality Act (CEQA) and the State CEQA Guidelines (Section 15126.6.a) require that alternatives to the proposed Project attain most of the basic objectives of the Project. Therefore, in order to explain the need for the proposed Project, and to guide in development and evaluation of alternatives, EPNG was asked to define its Project objectives. EPNG identified the following objectives for the Line 1903 Conversion Project:

(1) Make use of an existing pipeline, minimizing the environmental effects associated with new pipeline construction.

(2) Move Rocky Mountain gas to southern California markets via the Kern River Pipeline system to the Kern River/Mojave Common Facilities at Daggett, and then

- west on Line 1903 to Wheeler Ridge and California markets; or
- east on Line 1903 to Ehrenberg, Arizona and then west on the existing connections with California infrastructure of SoCalGas and North Baja; or
- east on the Mojave Pipeline to Amboy, then east on Line 1903 to Ehrenberg, Arizona and then west on existing California pipeline infrastructure, or east on Line 2000.

(3) Move additional San Juan gas supplies from northwest New Mexico to southern California markets via the EPNG system and the Mojave Pipeline at proposed Daggett and Amboy interconnects, then on Line 1903 west to Wheeler Ridge or east to Ehrenberg, Arizona and then west on existing California pipeline infrastructure, or east on Line 2000.

(4) Potentially accept shipments of liquified natural gas (LNG) that is regasified and carried in the North Baja Pipeline to southern California markets via Ehrenberg, Arizona then west on Line 1903 to interconnecting pipelines at Amboy, Daggett, or Wheeler Ridge.

ES.1.2 DESCRIPTION OF PROPOSED PROJECT

The Project consists of the conversion from crude oil to natural gas service of an approximately 304-mile segment of the former All American Pipeline from Ehrenberg, Arizona to Wheeler Ridge near Bakersfield, California (Figure ES-1).

The Project consists of the following components:

- replacement of certain short segments of Line 1903, including six road crossings and ten pipeline segments identified by smart pig as anomalies due to insufficient wall thickness, with new segments of pipe on the same alignment;

- removal of pig traps and valves and replacement with mainline pipe at Tejon Pump Station and Cadiz Pump Station, and removal of valves and replacement with mainline pipe at Mojave Heat Station, Twelve Gauge Lake Heat Station, and Ludlow Heat Station;

- pipeline abandonment and installation of new pipe on a different alignment at the Garlock Fault (Milepost [MP] 44.6) and pipeline replacement at the Calico Fault (MP 142.6);

- constructing the following four tie-ins and metering facilities: SoCalGas facilities at Wheeler Ridge (MP 2.1), Mojave/Kern Common Facilities at Daggett (MP 132.1), Mojave Pipeline at Amboy (MP 187.1), and EPNG Line 2000 at Ehrenberg (MP 303.5);

- installing a new 6.4-mile interconnect and metering station between the Cadiz Pump Station (MP 215.75) and the Mojave Pipeline;

- removing existing mainline valves at MP 50.5, MP 63, MP 126.0, MP 126.7, MP 255, MP 279.5, and MP 302.7, and MP 303.0;

- installing 22 new mainline valves along the line;

- installing a new pressure control valve at MP 247.6;

- removing four existing pig facilities and installing eight new pig traps, removing five pig signals, and removing 11 vent valves;

- replacing the existing Unocal tie-in (oil service) with mainline pipe;

- conducting a post construction 8-hour hydrostatic test on the entire Line 1903 prior to placing the pipeline into natural gas service; and

- conducting an internal pipeline inspection using a smart pig within 90 days after placing the pipeline into natural gas service, to re-assess the pipeline condition and to establish baseline data for future pipeline inspections.

Upon completion of construction and testing, Line 1903 would have a maximum allowable operating pressure (MAOP) of 655 pounds per square inch, gauge (psig) from Wheeler Ridge (MP 0) to Daggett (MP 132), 944 psig from Daggett to Cadiz (MP 215.75), 1,080 psig from Cadiz to MP 247.6, and 944 psig from MP 247.6 to Ehrenberg (MP 303.5). The 6.4-mile lateral pipeline from the Cadiz Pump Station to the Mojave Pipeline, would have a MAOP of 1,080 psig. Table 2-1 summarizes the maximum allowable operating pressures that the Project would operate under. These pressure limitations are based on the existing pipeline integrity assessment. Line 1903 is designed for bi-directional flow without additional compression.

Line 1903 would tie-in with the existing Mojave Pipeline at Amboy and at the Mojave/Kern Common Facilities at Daggett. The Cadiz Lateral would also tie-in Line 1903 to the Mojave Pipeline. The Mojave Pipeline is operated by EPNG and is jointly owned by EPNG and Kern River from Daggett westward. Because the Mojave Pipeline has an MAOP of 1,200 psig, a pressure regulator would be installed at all connections to Line 1903 to ensure that the MAOP of Line 1903 would not be exceeded. Line 1903 would be bi-directional. Therefore, flow can occur into or out of the Mojave Pipeline, depending on the relative pressures in the pipelines. The Mojave Pipeline provides access to San Juan basin and Permian basin natural gas supplies. The tie-in at the Mojave/Kern Common Facilities at Daggett also provides access to natural gas from the Kern River Pipeline and Rocky Mountain natural gas supplies. Line 1903 would tie-in to EPNG Line 2000, the remainder of the former All American Pipeline from McCamey, Texas to Ehrenberg, Arizona. The Line 2000 connection also provides access to Permian basin natural gas supplies. Line 1903 would also tie-in with SoCalGas's system at Wheeler Ridge, which delivers natural gas primarily to southern California.

ES.1.2.1 Proposed Facilities

Pipeline Facilities

The natural gas pipeline would consist of approximately 304 miles of 30-inch outside diameter (O.D.) steel pipe, with varying pipeline grade from API 5L – X65 to X70. The pipeline wall thickness (w.t.) would vary from 0.281–inch, 0.344-inch, or 0.438-inch

depending on location. The normal flow rate in the pipeline would be from 290 to 400 million standard cubic feet of natural gas per day (MMscfd) between Daggett and Ehrenberg, and 190 MMscfd between Daggett and Wheeler Ridge. The maximum flow rate in the pipeline would be 382 MMscfd between Daggett and Amboy, 481 MMscfd between Amboy and Ehrenberg, and 210 MMscfd between Daggett and Wheeler Ridge.

A new 6.4-mile natural gas pipeline connecting the Cadiz Pump Station and Mojave Line 1900 is also proposed as an expansion of the Line 1903 system. This lateral line would be a 30-inch O.D. steel pipe, with pipe grade X70 and wall thickness of 0.321 inches. The maximum flow rate on the Cadiz Lateral would be 668 MMscfd.

Aboveground Facilities

Permanent aboveground facilities on Line 1903 would be constructed at 22 locations. These facilities include 22 new valves, including automatic shutdown valves; meter facilities at the four pipeline tie-ins at Wheeler Ridge, Daggett, Amboy, and Ehrenberg; and new pigging facilities at Wheeler Ridge, Mojave Heat Station, Daggett, Cadiz Pump Station, and Ehrenberg. Existing launchers and receivers from the heating and pumping stations would not be reused on the Project. A new pressure control valve would be installed at MP 247.6. A metering facility, including pig facilities, is also planned in conjunction with the Cadiz Lateral at the connection with the Mojave Pipeline.

ES.1.2.2 Types of Construction Activities

EPNG has identified specific construction activities required for the conversion of the pipeline and has assigned each activity a unique code. The location of all Project activities can also be seen on maps of the Project area provided in Appendix A.

ES.1.2.3 Construction Schedule

Construction of the Project is scheduled to start as soon as possible after all regulatory approvals, including CSLC approval of leases of state lands and issuance of a notice to proceed, BLM approval of the amendment to the right-of-way (ROW) grant and issuance of a notice to proceed, and issuance of a FERC order granting authorization for the Project. The start of construction is anticipated to be in the second half of 2005.

ES.1.3 ALTERNATIVES TO PROPOSED PROJECT

The alternatives evaluated in this EIR/EA were developed based on the potentially significant impacts of the Project, which include the following three concerns:

(1) temporary construction-related impacts on biological resources, air quality, and soil erosion and compaction;

(2) concerns for the health and safety of communities in the vicinity of the Project that have expanded considerably since construction of the original All American Pipeline; and

(3) concerns related to the proximity of the pipeline to known active faults.

The following alternatives are analyzed to the same level of detail as the Project in the EIR/EA.

ES.1.3.1 No Project or Postponed Project Alternative

If the Project is postponed or denied, none of the potential environmental impacts identified in this EIR/EA would occur. Additionally, the stated objectives of the Project would not be met. This alternative would have none of the adverse impacts of the Project.

ES.1.3.2 Ehrenberg to Daggett Alternative

The potentially significant impact to public safety in the Class 2 and Class 3 areas of the pipeline, near Barstow and western Kern County, led to the development of an alternative to avoid these more densely populated areas. EPNG developed an alternative of not converting the entire approximately 304 miles of Line 1903 between Wheeler Ridge and Ehrenberg, but instead converting only the segment east of Daggett (MP 132.10 to MP 303.5, approximately 171 miles).

The Ehrenberg to Daggett Alternative would avoid or decrease some public safety, seismic and biological concerns associated with the proposed Project. Specifically, the alternative would avoid conversion and operation activities in the vicinity of several communities that have expanded since construction of the All American Pipeline.

These communities include Stallion Springs, Mountain Meadows, and the outer Barstow and Hinkley areas. This alternative would reduce any potential risks to these communities from the unlikely, but possible, event of a pipeline rupture. This alternative would also avoid fault crossings associated with the Wheeler Ridge to Daggett portion of Line 1903, including the Garlock Fault. This alternative would also avoid biological impacts to special-status species and habitats of the southern San Joaquin Valley and Tehachapi Range, including those to the blunt-nosed leopard lizard, a fully-protected state endangered species.

The conversion activities for this segment would be identical in terms of disturbance and location to those on this same segment of the proposed Project. East of Daggett, the operation of the alternative would be also identical to the operation of the same segment of the proposed Project. EPNG would continue to maintain the internal and external integrity of the unconverted pipeline west of Daggett with a nitrogen blanket and cathodic protection. For this alternative, however, no appurtenant facilities and gas delivery or receipts would be made west of Daggett. No other construction activities would be conducted on the pipeline segment west of Daggett.

EPNG states that this alternative would substantially meet the Project purpose and need and Project objectives. The alternative would provide EPNG with an additional connection of its north system (originating in the San Juan basin) and south system (originating in the Permian basin). It would provide enhanced operational flexibility for shippers using the ENPG system. This alternative would not, however, provide additional capacity for delivery west of Daggett to or from southern California markets. Natural gas sent to or from southern California would require the use of existing California infrastructure at Amboy and Daggett, including the Mojave Pipeline system. The alternative would still allow movement of natural gas from the Rocky Mountain region and Permian basin to southern California markets via Line 2000, the Kern River pipeline system, Kern River/Mojave Common Facilities at Daggett, and the North Baja pipeline system at Ehrenberg. The Ehrenberg to Daggett Alternative would still allow EPNG to transport gas from the Rocky Mountain area and California to Arizona, New Mexico, Texas, and Mexico. Additionally, it would allow EPNG to receive gas at Ehrenberg from the proposed LNG projects in Mexico and delivering the gas to customers in Arizona, New Mexico, Texas, and California.

ES.1.3.3 Ehrenberg to Cadiz Alternative

EPNG developed a second alternative that eliminates the potentially significant impact on public safety in the Class 2 and Class 3 areas of the pipeline, near Barstow and western Kern County. In this alternative, only the segment east of the Cadiz Pump Station (MP 215.75 to MP 303.5, approximately 88 miles) would be converted. In addition, the 6.4-mile new pipeline segment between the Cadiz Pump Station and the Mojave Pipeline would be constructed. Based on the existing pipeline integrity assessment, the MAOP of the pipeline would be 1,080 psig from Cadiz to MP 247.6, 944 psig from MP 247.6 to Ehrenberg (MP 303.5), and 1,080 psig in the new lateral from Cadiz to the Mojave Pipeline.

The Ehrenberg to Cadiz Alternative is very similar to the Ehrenberg to Daggett alternative, but would convert 88 miles of pipeline, rather than 171 miles. The Ehrenberg to Cadiz Alternative would decrease some public safety, seismic and biological concerns associated with the proposed Project. Specifically, the alternative would avoid conversion and operation activities in the vicinity of several communities that have expanded since construction of the All American Pipeline. These communities include Stallion Springs, Mountain Meadows, and the outer Barstow and Hinkley areas. This alternative would reduce any potential risks to these communities from the unlikely, but possible, event of a pipeline rupture. This alternative would also avoid fault crossings associated with the Wheeler Ridge to Cadiz portion of Line 1903, including the Garlock Fault and the Calico Fault. This alternative would also avoid biological impacts to special-status species and habitats of the southern San Joaquin Valley and Tehachapi Range.

The conversion activities for this segment would be identical in terms of disturbance and location to those on this same segment for the proposed Project. East of Cadiz, including the lateral connecting to the Mojave Pipeline, the operation of the alternative would be identical to the operation of the same segment of the proposed Project. EPNG would continue to maintain the internal and external integrity of the unconverted pipeline west of Cadiz with a nitrogen blanket and cathodic protection. For this alternative, however, no appurtenant facilities and gas delivery or receipts would be made west of Cadiz. No other construction activities would be conducted on the pipeline segment west of Cadiz.

EPNG states that this alternative would substantially meet the Project purpose and need and Project objectives. The alternative would provide EPNG with an additional connection of its north system (originating in the San Juan basin) and south system (originating in the Permian basin). It would provide enhanced operational flexibility for shippers using the ENPG system. This alternative would not, however, provide additional capacity for delivery west of Daggett to or from southern California markets. The alternative would not allow connection to the SoCalGas system at Wheeler Ridge, the Kern River Pipeline at Daggett, or the Mojave Pipeline at Amboy. Natural gas sent to or from southern California would require the use of existing California infrastructure at Amboy and Daggett, including the Mojave Pipeline system. The alternative would allow EPNG to receive gas at Ehrenberg from the proposed LNG projects in Mexico and delivering the gas to customers in Arizona, New Mexico, Texas, and California.

ES.1.3.4 Alternatives Eliminated from Full Evaluation

Two route alternatives have been proposed on the section of Line 1903 from Wheeler Ridge to Daggett. Two route alternatives have also been proposed on the section of Line 1903 from Ehrenberg to Daggett. These route alternatives would decrease the risk to communities adjacent to the pipeline being affected by potential ruptures in Line 1903 as a result of seismic activity or accidents.

Two Stallion Springs Route Alternatives would circumvent the community of Stallion Springs located approximately between MP 24 and MP 26.5. One route would circumvent the community to the north and one to the south of existing residences. Residences in this area were built following construction of the original All American Pipeline. Several residences are within the potential impact area of the Project should the pipeline rupture. Two alternatives circumvent sections of the pipeline crossing dry lake beds. These dry lakes include the dry portion of Bristol Lake (MP 199.5) and Troy Lake (MP 147.5 to MP 150). These alternatives would reduce the potential for corrosion of Line 1903.

While these four alternatives potentially increase the safety of Line 1903, they do not meet the stated Project objective of converting existing pipeline infrastructure to natural gas use. Construction of these alternatives would create new disturbance on a new pipeline ROW. The Stallion Springs Route Alternatives would also traverse more biologically sensitive habitats than the existing Line 1903. The Bristol Lake Alternative would also place new ROW for Line 1903 close to the town of Amboy. Additionally,

EPNG proposes replacements of some sections of pipe at the existing dry lake crossings of Bristol Lake and Troy Lake on Line 1903. These new pipe replacements would be sufficiently designed to minimize corrosion and potential accidents on the pipeline. Additionally, EPNG proposes additional surveillance of Line 1903 and cathodic protection systems to further protect the Line 1903. All four route alternatives are therefore eliminated from further analysis.

ES.1.4 ENVIRONMENTAL IMPACTS AND MITIGATION

The environmental impacts associated with construction and operation of the El Paso Line 1903 Conversion Project are analyzed in this EIR/EA using information provided by EPNG; field investigations; comments received during scoping; literature searches; and contacts with Federal, tribal, State, and local agencies.

In the evaluation of each resource category and issue in the EIR/EA, the environmental setting is described; followed by a discussion of the regulatory framework; identification of significance criteria or thresholds; and a description of potential environmental impacts and proposed mitigation, as needed. The following sections summarize the findings of this analysis. Additionally, Table ES-1 presents a summary of impacts and mitigation measures for the proposed Project by issue area. For each issue area, potential impacts are described and classified, recommended mitigation is listed, and the level of impact with mitigation is stated.

EPNG has prepared specific plans that include measures to mitigate potential impacts. These plans are not included in the mitigation measures developed for the EIR/EA as they are taken to be part of the proposed Project. These plans include:

- Upland Erosion Control, Revegetation, and Maintenance Plan (UECRM Plan);
- Line 1903 Wetland and Waterbody Construction and Mitigation Procedures (WWCM Procedures);
- Storm Water Pollution Prevention Plan (SWPPP);
- Spill Prevention, Containment, and Countermeasure Plan (SPCC Plan);
- Noxious Weeds Protection Plan;
- Fire Prevention and Suppression Plan;

- Desert Tortoise Handling Plan;
- Protection Measures for Special-Status Species during Construction;
- Contaminated Soils Plan; and
- Emergency Response Plan.

Table ES-1. Potentially Significant Impacts of El Paso Line 1903 Conversion Project

Impact Number	Impact	Impact Class[1]	Recommended Mitigation Measures	Location
Section 4.2 Biological Resources				
BIO-1	**Temporary Disturbance of Wetlands:** Construction and maintenance activities in wetlands could result in loss of wetland values and functions	**II**	**BIO-1. Restoration Plan:** Prior to construction in each wetland, EPNG would develop a Restoration Plan to meet resource agency requirements for each wetland affected by the Project.	MP 44.59 and MP 149.10
BIO-2	**Possible Spread of Noxious Weeds:** Construction and maintenance activities could result in the spread of noxious weeds, to the detriment of native species.	**II**	**BIO-2. Weed Control:** Where noxious weeds could be disturbed during construction or maintenance on BLM properties, a water wash station or use of compressed air would be used for removing seeds from construction equipment to prevent the spread of noxious weed seeds.	Entire alignment and staging areas
BIO-3	**Potential Impacts on the San Emigdio Blue Butterfly from Maintenance Activities:** Maintenance activities could adversely affect host plants or larvae of the San Emigdio blue butterfly.	**II**	**BIO-3a. Pre-Maintenance Surveys:** EPNG would conduct pre-maintenance surveys for saltbush host plants for the San Emigdio blue butterfly in areas where habitat for such species is present (between MP 0 and MP 27.5). **BIO-3b. Avoidance and Minimization Measures:** To the extent possible, maintenance activities would avoid the removal or crushing of saltbush plants between approximately MP 0 and MP 27.5.	MP 0 – MP 27.5
BIO-4	**Potential Impacts on the Blunt-Nosed Leopard Lizard:** Construction and	**I**	**BIO-4a. Pre-Construction and Pre-maintenance Surveys:** EPNG would conduct pre-construction and pre-maintenance surveys for the blunt-nosed leopard lizard according to	MP 14 – MP 22.48

Impact Number	Impact	Impact Class[1]	Recommended Mitigation Measures	Location
	maintenance activities could result in mortality or loss of burrows for the blunt-nosed leopard lizard.		established protocols. **BIO-4b. Avoidance of Occupied Burrows:** Construction activities would avoid all burrows found during pre-construction and maintenance surveys that are likely to house blunt-nosed leopard lizards. (While the USFWS may permit the excavation of occupied burrows to move animals out of harm's way, the CDFG does not.) **BIO-4c. Fencing:** Following pre-construction and pre-maintenance surveys, EPNG would fence-off the ROW or portions of the ROW to minimize the potential for special-status wildlife usage through the Project area. **BIO-4d. Offsite Mitigation:** If construction and maintenance activities cannot avoid some burrows, EPNG would endow offsite habitat improvements or habitat acquisitions at a ratio stipulated by the resource agencies. **BIO-4e. TES Species Education Program:** All EPNG employees and its contractors involved with pipeline inspections and maintenance activities would be required to take a threatened and endangered species (TES) education program. **BIO-4f. Reports of Encounters with Listed Species:** Encounters with a listed species would be reported to an authorized and qualified biologist. These biologists would maintain records of all listed species encountered during Project activities. **BIO-4g. Handling by a Qualified Biologist:** Only personnel authorized by USFWS or CDFG may handle listed species. Each	MP 14 – MP 22.48 Special-status wildlife use areas Areas with critical habitat Entire alignment Entire alignment Entire alignment

Impact Number	Impact	Impact Class[1]	Recommended Mitigation Measures	Location
			of the biologists would have appropriate qualifications and would be approved by CDFG and USFWS at least 30 days prior to any ground disturbing activities.	
			BIO-4h. Qualified Biologist's Authority: The authorized biologists would have authority to immediately stop any activity that is not in compliance with the Biological Opinion or the Section 2081 permit.	Entire alignment
			BIO-4i. Reports of Dead or Injured Animals: Upon locating a dead or injured listed species, EPNG would make initial notification to CDFG and USFWS within 3 working days of the discovery.	Entire alignment
			BIO-4j. Existing Travel Routes: Existing routes of travel to and from the maintenance and inspection sites would be used. Cross-country use of vehicles and equipment would be strictly prohibited.	Entire alignment
			BIO-4k. Trash Control: Trash and food items would be contained in closed containers and removed daily to reduce their attractiveness to opportunistic predators such as common ravens (Corvus corax), coyotes (Canis latrans), and feral dogs.	Entire alignment
			BIO-4l. Pet Restrictions: Employees would be prohibited from bringing pets to the Project site/area.	Entire alignment
			BIO-4m. Firearms Restrictions: Firearms would be prohibited from the Project site/area.	Entire alignment
			BIO-4n. Removal of Equipment and Unused Materials: Upon completion of construction activities and each maintenance action	

Impact Number	Impact	Impact Class[1]	Recommended Mitigation Measures	Location
			on the ROW, all unused material and equipment would be removed from the site. This condition does not apply to fenced compressor station sites.	
			BIO-4o. Hazardous Material Control: Any fuel or hazardous waste leaks or spills would be stopped/repaired immediately and cleaned up at the time of occurrence in accordance with EPNG's Spill Plan. Any spills in desert tortoise habitat would be reported to the appropriate BLM field office within 24 hours.	Entire alignment
			BIO-4p. Re-contouring and Re-vegetation: After construction, the ROW would be recontoured to match as closely as possible the original contours of the area. EPNG would stockpile grubbed or bladed native vegetation in desert tortoise habitat for Class IV activities.	Entire alignment
			BIO-4q. Annual List of Proposed Activities: In January of each year, beginning in 2004, EPNG would submit a list of proposed activities by name, category, location, and approximate start date to the BLM.	Entire alignment
			BIO-4r. Avoidance Scheduling: EPNG would avoid evening and night work in the San Joaquin Valley to the extent possible. Within the San Joaquin Valley, maintenance actions during evening hours would be minimized and work would not occur at night unless it is an emergency**.**	San Joaquin Valley
			BIO-4s. Emergency Actions: For emergency situations EPNG would notify the appropriate BLM field office within 24 hours.	Entire alignment

Impact Number	Impact	Impact Class[1]	Recommended Mitigation Measures	Location
BIO-5	**Potential Impacts on the Desert Tortoise:** Construction and maintenance activities could result in mortality or loss of burrows for the desert tortoise.	**II**	**BIO-5a. USFWS Protocols:** EPNG would implement the provisions of the Field Survey Protocol for Any Federal Action That May Occur within the Range of the Desert Tortoise (USFWS 1992). If no desert tortoises or their signs are found within the protocol distance of the construction locations during species-specific surveys, no adverse impacts are expected. **BIO-5b. Equipment, Vehicle and Pipe Checks:** Desert tortoises commonly seek shade. EPNG employees and their contractors working within the geographic range of this species would be required to check their equipment, vehicles and pipeline for shade-seeking tortoises prior to commencing Project activities. **BIO-5c. Handling by a Qualified Biologist:** Only authorized personnel would move a desert tortoise. The authorized personnel would follow the appropriate protocols outlined in Guidelines for Handling Desert Tortoises during Construction Projects (Desert Tortoise Council 1996) when handling desert tortoises or excavating their burrows. **BIO-5d. Pre-construction Sweeps:** An authorized biologist would perform a pre-construction sweep in desert tortoise habitat and would remain on site during working hours until permanent and temporary fencing has been installed. **BIO-5e. Avoidance Scheduling for Routine Road Maintenance:** EPNG would conduct routine road surface maintenance activities during the inactive season of the desert tortoise (October 16 through March 1 and June 16 through August 1) in desert tortoise habitat. Localized repair of major damage may take place throughout the year.	MP 40- MP 303.5; Cadiz Lateral MP 40- MP 303.5; Cadiz Lateral MP 40- MP 303.5; Cadiz Lateral MP 40- MP 303.5; Cadiz Lateral MP 40- MP 303.5;

Impact Number	Impact	Impact Class[1]	Recommended Mitigation Measures	Location
			BIO-5f. Trench Mitigation Measures: EPNG has the option of erecting desert tortoise fencing in lieu of inspecting open trenches in desert tortoise habitat; however, periodic inspections of trenches and holes would be made by biological monitors to ensure that desert tortoises have not become trapped.	Cadiz Lateral
			BIO-5g. Burrow Excavation for Protective Removal: All desert tortoise burrows or pallets in the construction zone that cannot be avoided would be excavated or blocked by a qualified biologist.	Entire alignment
			If desert tortoises need to be moved at a time of day when ambient temperatures could harm them (less than 40 ^{o}F or greater than 90 ^{o}F), they would be held overnight in a clean cardboard box. These desert tortoises would be kept in the care of the authorized biologist under appropriate controlled temperatures and released the following day when temperatures are favorable. All cardboard boxes would be appropriately discarded after one use.	Entire alignment
			BIO-5h. Dust Control: Dust control watering of the ROW within desert tortoise habitat would be conducted in a manner that does not result in the ponding of water. If ponding occurs, affected areas would be checked on a regular basis for the presence of tortoises and other special-status species.	Entire alignment
			BIO-5i. Speed Limits: Except on county-maintained roads, vehicle speeds would not exceed 20 miles per hour through desert tortoise habitat.	Entire alignment
			BIO-5j. Implement Mitigation Measure 4j and Additional Treatment Measures: Implementation of these measures would	Entire alignment

Impact Number	Impact	Impact Class[1]	Recommended Mitigation Measures	Location
			result in the recovery of any injured tortoises that are treatable. **BIO-5k. Implement Mitigation Measures 4c, 4e, 4f and 4h—4s:** Implementation of these measures would further reduce the risk of construction and maintenance impacts on the desert tortoise.	Entire alignment
BIO-6	**Potential Impacts on Other Special-Status Amphibian and Reptile Species:** Construction and maintenance activities could result in mortality to other special-status amphibian and reptile species.	**II**	**BIO-6a. Fencing Work Areas:** During construction and major maintenance activities, EPNG would fence the work areas to exclude all species of wildlife present in the immediate vicinity of the Project. **BIO-6b. Monitoring Open Pits, Trenches, and Pipes:** During construction and major maintenance activities, EPNG would monitor open pits, trenches, and pipes to protect all species of wildlife present. **BIO-6c. Capture and Removal:** A qualified biologist would inspect the ROW immediately prior to commencement of pipeline trenching or other surface disturbing activities in habitat for silvery legless lizard, San Joaquin coachwhip, California horned lizard, and Mojave fringe-toed lizard. The biologist would capture and remove special-status species out of the path of construction. **BIO-6d. Implement Mitigation Measures BIO- 4e, and 4h—4s:** Implementation of these measures would further reduce the risk of potential impacts on other special-status amphibian and reptile species.	Entire alignment Entire alignment Entire alignment Entire alignment

Impact Number	Impact	Impact Class[1]	Recommended Mitigation Measures	Location
BIO-7	**Potential Impacts on the San Joaquin Kit Fox:** Construction and maintenance activities could result in mortality or loss of dens for the San Joaquin kit fox.	**II**	**BIO-7a. Standardized Recommendations for the Protection of San Joaquin Kit Foxes:** EPNG would follow the USFWS Standardized Recommendations for the Protection of San Joaquin Kit Foxes prior to or during ground disturbance (USFWS 1999). These recommendations include pre-construction surveys, following standardized protocols, and avoidance of habitat disturbance between January 1 and April 30. **BIO-7b. Avoidance Measures:** EPNG would avoid activities near known dens to the extent possible. If dens were found within the construction or maintenance locations, the activity location would be adjusted if possible to avoid direct effects. Buffer dimensions would be as stipulated in EPNG's Biological Assessment or in a Biological Opinion issued by the USFWS. **BIO-7c. Buffer Zones:** EPNG would limit activities in buffer zones to vehicle operation and equipment operation on existing roads only. **BIO-7d. Agency Guidance:** EPNG would follow agency guidance where dens cannot be avoided. If destruction of a San Joaquin kit fox den cannot be avoided, CDFG and USFWS would be contacted for den excavation guidance. If a natal den cannot be avoided, it would be hand excavated by a biologist between August 1 and December 14. **BIO-7e. Implement Mitigation Measures BIO-4b and 4e—4t:** Implementation of these measures would further reduce the risk of potential impacts on the San Joaquin kit fox. **BIO-7f. Implement Mitigation Measures BIO-6a and 6b:** Implementation of fencing and monitoring would further reduce	MP 0 – MP 40 MP 0 – MP 40 MP 0 – MP 40 MP 0 – MP 40 Entire alignment Entire alignment Entire alignment

Impact Number	Impact	Impact Class[1]	Recommended Mitigation Measures	Location
			the risk of impacts to the San Joaquin kit fox.	
BIO-8	**Potential Impacts on the Tipton Kangaroo Rat:** Construction and maintenance activities could result in mortality or loss of burrows for the Tipton kangaroo rat.	**II**	**BIO-8a. Pre-Construction and Pre-Maintenance Surveys:** EPNG would conduct pre-construction and pre-maintenance surveys for the Tipton kangaroo rat, including the use of fiber-optic viewing scopes to determine whether burrows are actually occupied; if necessary, animals would be moved. **BIO-8b. Avoidance Measures:** To the extent possible, all burrows known or likely to be used by Tipton kangaroo rats would be avoided during construction and maintenance activities. **BIO-8c. Capture and Removal:** When burrows known to be used by Tipton kangaroo rats cannot be avoided, individuals of this species would be captured and moved to a safe location by a properly permitted biologist. **BIO-8d. Implement Mitigation Measures BIO-4d—4s:** Implementation of these measures would further reduce the risk of potential impacts on the Tipton kangaroo rat. **BIO-8e. Implement Mitigation Measures BIO 6a and 6b:** Implementation of fencing and monitoring would further reduce the risk of impacts on the Tipton kangaroo rat.	MP 14- MP 22.5 MP 14- MP 22.5 MP 14- MP 22.5 MP 14- MP 22.5 MP 14- MP 22.5
BIO-9	**Potential Impacts on the Mohave Ground Squirrel:** Construction and maintenance activities could result in mortality or	**II**	**BIO-9a. Pre-Construction and Pre-Maintenance Surveys:** EPNG would conduct pre-construction and pre-maintenance surveys (for major maintenance activities) in areas that are likely to be occupied by the Mohave ground squirrel.	MP 50-MP 132

Impact Number	Impact	Impact Class[1]	Recommended Mitigation Measures	Location
	loss of burrows for the Mohave ground squirrel.		**BIO-9b. Avoidance Measures:** To the extent possible, EPNG would avoid known burrows of this species. If Mohave ground squirrel burrows cannot be avoided, any individuals present would be removed by an authorized biologist. **BIO-9c. Implement Mitigation Measures BIO-4d—4s:** Implementation of these measures would reduce the risk of potential impacts on the Mohave ground squirrel. **BIO-9d. Implement Mitigation Measures BIO 6a and 6b:** Implementation of fencing and monitoring would further reduce the risk of impacts on the Mohave ground squirrel.	MP 50-MP 132 MP 50-MP 132 MP 50-MP 132
BIO-10	**Potential Impacts on Other Special-Status Mammal Species:** Construction and maintenance activities could result in mortality or loss of burrows for other special-status mammalian species.	**II**	**BIO-10a. Pre-Construction and Pre-Maintenance Surveys:** EPNG would conduct pre-construction and pre-maintenance surveys (for major maintenance activities) in areas that are likely to be occupied by short-nosed kangaroo rat, Tehachapi pocket mouse, San Joaquin pocket mouse, or Southern or Tulare grasshopper mice. **BIO-10b. Avoidance Measures:** To the extent possible, EPNG would avoid known burrows of these species. If Mohave ground squirrel and other mammalian species burrows cannot be avoided, any individuals present would be removed by an authorized biologist. **BIO-10c. Implement Mitigation Measures BIO-4e—4s: I**mplementation of these measures would reduce the risk of potential impact on other special-status mammalian species. **BIO-10d. Implement Mitigation Measures BIO-6a and 6b:** Implementation of fencing and monitoring would further reduce	MP 0 – 22.5, MP 14, MP 50 MP 0 – 22.5, MP 14, MP 50 Entire alignment Entire alignment

Impact Number	Impact	Impact Class[1]	Recommended Mitigation Measures	Location
			the risk of impacts on other special-status mammalian species.	
BIO-11	**Potential Impacts on Federally or State-Listed Birds of Riparian Habitats:** Maintenance activities could result in reduced reproductive success for Yuma clapper rail, southwestern willow flycatcher, elf owl, Gila woodpecker, and western yellow-billed cuckoo.	**II**	**BIO-11. Avoidance Scheduling:** EPNG would schedule maintenance activities to be conducted between MP 301.5 and MP 303.25 from September 15 through April 14 (outside the breeding seasons for these species).	MP 301.5 – 303.25
BIO-12	**Potential Impacts on Special-Status Raptor Species and their Nesting Habitat:** Construction and maintenance activities could result in mortality or nest loss for burrowing owls and in reduced reproductive success or loss of nesting habitat for other special-status raptor species.	**II**	**BIO-12a. Pre-Construction and Pre-Maintenance Surveys:** EPNG would conduct pre-construction and pre-maintenance surveys for raptor nests. **BIO-12b. Avoidance Measures:** EPNG would implement avoidance measures during the breeding season for raptors. **BIO-12c. Burrowing Owl Mitigation Measures:** EPNG would implement mitigation measures from the California Burrowing Owl Consortium's Burrowing Owl Survey Protocol and Mitigation Guidelines.	Entire alignment, MP 292 – 303.4 Entire alignment, MP 292 – 303.4
BIO-13	**Potential Impacts on Habitat for Other Special-Status Bird Species:** Construction and maintenance activities	**II**	**BIO-13a. Pre-Construction and Pre-Maintenance Surveys:** EPNG would conduct pre-construction and pre-maintenance surveys for nesting birds during breeding seasons for any special-status birds potentially present in the construction or maintenance	Entire alignment

Impact Number	Impact	Impact Class[1]	Recommended Mitigation Measures	Location
	could result in reduced reproductive success or nest loss for certain other special-status bird species, including loggerhead shrike, Lewis' woodpecker, Costa's hummingbird, Bendire's thrasher, Crissal thrasher, LeConte's thrasher, and hepatic tanager.		sites. **BIO-13b. Avoidance Measures:** If pre-construction or pre-maintenance surveys reveal the presence of a potentially active nest for one of the species identified in this impact, EPNG would implement avoidance measures by (1) postponing activities until the offspring have fledged, or (2) fencing off the nesting area to protect it from damage. **BIO-13c. Additional Measures:** CDFG would be contacted to determine appropriate mitigation If Bendire's thrasher is found to be nesting within 1,000 feet of work activities.	Entire alignment Entire alignment
BIO-14	**Potential Impacts on Federally or State-Listed Plant Species:** Maintenance activities could result in mortality to federally or State-listed plant species.	**II**	**BIO-14a. Pre-Maintenance Surveys:** EPNG would conduct pre-maintenance surveys for federally and State-listed plant species in areas where habitat for such species is present. **BIO-14b. Avoidance Measures or Other Agency-Recommended Mitigation Measures:** To the extent possible, potential impacts from maintenance activities would be avoided by avoiding populations of these species or by conducting maintenance activities at times when annual species are not growing. If a population cannot be avoided, resource agencies would be consulted to determine suitable additional mitigation measures. **BIO-14c. Seed Collection:** Ripe seeds may be collected for use in re-seeding if a special-status plant species cannot be avoided. **BIO-14d. Re-seeding with Special-Status Species:** Following completion of the construction activities, the ROW would be restored according to the UECRM Plan.	Entire alignment Entire alignment Entire alignment Entire alignment

Impact Number	Impact	Impact Class[1]	Recommended Mitigation Measures	Location
BIO-15	**Potential Impacts on Other Special-Status Plant Species:** Maintenance activities could result in mortality to other special-status plant species.	**II**	**BIO-15. Implement Mitigation Measures BIO-14a through 14d:** To the extent possible, potential impacts from maintenance activities would be avoided by avoiding populations of these species or by conducting maintenance activities at times when annual species are not growing.	Entire alignment
BIO-16	**Potential Impacts on Desert Succulent Species:** Construction activities could result in mortality to desert succulent species, which are protected under various County ordinances and BLM policies.	**II**	**BIO-16. Salvage Desert Succulent Species:** All cactus, yucca, and agave species within disturbance areas would be avoided, transplanted adjacent to the disturbance area, and/or re-transplanted back into the disturbance area after surface disturbing activities are completed.	Entire alignment
Section 4.3 Agricultural Resources				
AGR-1	**Temporary Loss of Rangelands or Income:** Construction activities could impact rangelands.	**II**	**AGR-1a.** EPNG would regrade and restore lands back to their previous condition. **AGR-1b. Livestock Control:** Each fence crossed by construction activities would be braced and secured prior to cutting the opening to prevent slacking of the wire. Openings would be closed by temporary gates as necessary. **AGR-1c. Livestock Safety:** Temporary fencing would be installed as required to prevent livestock from entering the work area.	Areas where the pipeline passes through rangelands. Areas where the pipeline passes

Impact Number	Impact	Impact Class[1]	Recommended Mitigation Measures	Location
			AGR-1d. Compensation to Landowners: EPNG would provide each landowner and/or farmer fair compensation for the loss of income from cultivation of land, or harm to livestock, due to pipeline construction activities.	through rangelands. Areas where the pipeline passes through rangelands.
AGR-2	**Temporary Loss of Agricultural Land or Income:** Construction impacts to agricultural land could result in loss of topsoil and/or farming income.	**II**	**AGR-2. Topsoil Preservation:** EPNG would set aside at least eight inches of topsoil removed during pipeline construction on agricultural lands and preserve it for replacement and restoration after construction for continued agricultural use.	Areas where the pipeline passes through agricultural lands.
AGR-3	**Interruption of Irrigation:** Construction activities could damage or interrupt irrigation thereby reducing the crop yield.	**II**	**AGR-3a. Maintain Flow:** EPNG would maintain the flow of irrigation systems or coordinate the temporary shutoff of systems with affected landowners or tenants. **AGR-3b. Repair Damage to Systems**: EPNG would repair damaged irrigation systems as soon as possible and monitor their effectiveness for a period of at least 2 years following construction activities. **AGR-3c. Limit Construction Time:** EPNG would complete construction and restoration within a 7-day (maximum) period where pivot irrigation is active.	Areas where the pipeline passes through agricultural lands. Areas where the pipeline passes through rangelands.

Impact Number	Impact	Impact Class[1]	Recommended Mitigation Measures	Location
AGR-4	**Permanent Loss of Agricultural Land or Income:** The operation of the Project would permanently convert 1.49 acres of irrigated agricultural lands and 1.56 acres of rangeland to industrial use.	**II**	**AGR-4 Compensation to Landowners:** EPNG would negotiate compensation with the landowner(s) for portions of fields that would be taken out of production.	MP 2.10, MP 22.48, MP 296.23, MP 298.23, MP 298.81, MP 302.68, MP 303.4
Section 4.4 Geology and Soils				
GEO-1	**Seismic-Induced Damage:** Seismic motion could damage the pipeline.	**II**	**GEO-1a. Checking for Pipe Damage:** 60 days prior to the start of operations as a natural gas transmission system, EPNG must have a Post Earthquake Inspection and Monitoring Plan approved by the CSLC. **GEO-1b. Geohazard Assessment along Cadiz Lateral:** 60 Days prior to construction, EPNG must have a pipeline design approved by CSLC for the Cadiz lateral. The design must be supported by a geohazard assessment and soil sampling equivalent to that conducted for Line 1903.	Garlock, and Calico Faults. Cadiz Lateral
GEO-2	**Exposure of Paleontological Resources:** Construction activities could expose paleontological resources.	**II**	**GEO-2. Avoidance or Scientific Excavation:** If avoidance of the resource were not feasible, scientific excavation to recover fossil materials would occur. No later than 60 days prior to construction, EPNG would prepare a Paleontological Resources Management Plan for review and approval by the CSLC and BLM.	Palo Verde Mes Blythe; Danby Lake/Ward Valley/Saltmarsh; Archer/Cadiz Valley;

Impact Number	Impact	Impact Class[1]	Recommended Mitigation Measures	Location
				Ludlow/Argos; Hector; Daggett to Calico Fault; Hawes/Halendale Fault; and Rogers Lake.
Section 4.5 Hydrology and Water Quality				
WQ-1	**Potential Impacts on Private or Public Water Supplies:** Construction activities could affect quality and/or yield of private or public water supplies.	**II**	**WQ-1. Protection of Private and Public Water Supplies:** Prior to construction, EPNG would contact landowners to identify the location of all private wells within 200 feet of approved construction workspaces. In these and other areas of potential groundwater impact, special precautions would be taken to ensure protection of groundwater.	All construction and maintenance areas. Known well at MP 35.05.
Section 4.6 Hazards and Public Safety				
HAZ-1	**Potential for Gas Line Rupture and Release of Natural Gas:** Line 1903 could rupture and release natural gas, potentially causing a fire or explosion.	**I**	**HAZ-1a. Installation of Shutdown Valves:** EPNG would install automatically-actuated shutdown valves upstream and downstream of Class 3 areas. **HAZ-1b. Revised Operation and Maintenance Plan:** 60 days prior to placing Line 1903 into service, EPNG would obtain approval from the CSLC for a revised Operation and Maintenance Plan. The revised plan would address internal and external maintenance inspections of the completed facility, including details of integrity testing methods to be applied, corrosion monitoring and testing of the cathodic protection	MP 43-44 Entire alignment

Impact Number	Impact	Impact Class[1]	Recommended Mitigation Measures	Location
			system, and leak monitoring. **HAZ-1c. Measures to Reduce Third Party Damage:** 60 days prior to placing Line 1903 in service within Class 2 and 3 areas, EPNG would obtain approval from CSLC for enhanced protection from third-party damage. EPNG must consider installation of concrete mats or other measures that provide similar levels of protection.	MP 24-27, MP 32-37, MP 42-44, MP 74-75, MP 118-123
Section 4.7 Air Quality				
AIR-1	**Construction Emissions:** Construction emissions could temporarily exceed significance thresholds established by the Mojave Desert Air Quality Management District (MDAQMD).	**II**	**AIR-1a. Maintenance of Construction Equipment:** EPNG would maintain construction equipment in accordance with manufacturer's recommendations to prevent unnecessary emissions of NO_x, CO, VOC, and SO_2. **AIR-1b. Fuel Use:** EPNG would use lower sulfur #2 diesel fuel in heavy-duty construction equipment, with a sulfur content of 0.5 percent, to minimize SO_2 emissions. EPNG would burn 87-octane gasoline in other construction equipment, such as light-duty trucks. **AIR-1c. Dust Control Plan:** 30 days prior to construction**,** EPNG would obtain CSLC approval of a Dust Control Plan indicating the dust suppression procedures that would be used to minimize emissions and impacts on air quality from construction activities.	Entire alignment Entire alignment Entire alignment
Section 4.8 Traffic and Transportation				
TR-1	**Disruption of Traffic Flow at Road Crossings Needing Replacement:** Traffic flow would be	**II**	**TR-1. Traffic Control Plans:** 60 days prior to construction, EPNG would submit a traffic control plan for each of the road crossings where trenching of roadways is proposed. Traffic Control Plans are required for construction activities that would	MP 3.50, MP 5.25, MP 122.75, MP 160.00, MP 301.00, Cadiz

Impact Number	Impact	Impact Class[1]	Recommended Mitigation Measures	Location
	disrupted at six road crossings where trenching of roadways is proposed.		directly or indirectly disturb the local traffic flow at each geographic location. These plans would contain elements on detour routing, flagging, emergency contact numbers, methods of advance notification for residences and businesses, and emergency operations agencies in proximity to each work site.	Lateral
Section 4.9 Noise				
NOI-1	**Construction Noise:** Construction activities within 500 feet of residences could generate noise levels that exceed county standards.	**II**	**NOI-1 Limit Hours of Operation:** Construction activities would be limited to weekdays and daylight hours (except when compromising the safety or integrity of the project) to minimize disturbance to residential communities.	MP 2-4 MP 11-12 MP 16-17 MP 23-37 MP 38-39 MP 41-45 MP 54-55 MP 72-76 MP 91-92 MP 105-106 MP 113-125 MP 128-130 MP 136-138 MP 139-140 MP 141-143 MP 199-200 MP 215-216 MP 292-294 MP 295-298 MP 300-301

Impact Number	Impact	Impact Class[1]	Recommended Mitigation Measures	Location
Section 4.10 Cultural Resources				
CU-1	**Unanticipated Discovery of Cultural Resources or Human Remains:** Cultural resources, including human remains, which were not identified during the surveys, could be discovered during construction.	**II**	**CU-1a. Stop Work:** If previously undiscovered cultural resources, such as lithic debitage or groundstone, shell midden, historic debris, building foundations, or human bone, are found within the APE during construction, all ground-disturbing activities within the immediate area would be halted at the site and within 100 feet of the site. Work would stop until the find has been evaluated by a professional archaeologist and the appropriate state and Federal agencies have been notified. **CU-1b. Unanticipated Discovery Plan:** 60 days prior to ground disturbance activities, EPNG would submit to the CSLC an Unanticipated Discovery Plan for review and comment. The plan would outline the processes of notification, evaluation, and mitigation should unanticipated cultural resources be found during construction.	All construction and maintenance areas. All construction and maintenance areas.
CU-2	**Potential for Indirect Impacts on Cultural Resources during Construction:** Construction and maintenance activities could result in indirect impacts on cultural resources.	**II**	**CU-2. Training:** Prior to disturbance activities, and throughout the Project construction period as needed for all new construction personnel, EPNG would provide training to construction personnel. The training would include onsite avoidance requirements and the procedures for reporting any sensitive resources that may be discovered during Project-related ground disturbance. The training program would explain the potential for exposing cultural resources, including prehistoric and historic resources, during construction; the locations of potentially sensitive areas; and protocols to treat unexpected discoveries.	Entire alignment
CU-3	**Impacts on Recorded Archaeological Sites Adjacent to the Project**	**II**	**CU-3a. Native American Consultation:** Appropriate consultation procedures as outlined in 36 CFR Part 800 would be completed	Entire alignment

Impact Number	Impact	Impact Class[1]	Recommended Mitigation Measures	Location
	APE: Construction activities could inadvertently damage intact portions of cultural resources adjacent to the APE.		prior to construction. **CU-3b. Validation Survey:** Monitoring is recommended to ensure that other portions of the site that are adjacent to the APE are not inadvertently damaged. Archaeological testing and/or historical documentation is recommended for NRHP eligible sites. **CU-3c. Avoidance:** Mitigation of impacts created by construction and maintenance of the proposed Project would in most cases be accomplished by avoiding NRHP-eligible or listed cultural resources. EPNG would revise the alignment to the extent feasible to avoid all archaeological sites by at least 50 feet without exacerbating other environmental impacts. Archaeological sites within 100 feet of the alignment would be barrier fenced or otherwise protected to prevent accidental disturbance during construction. **CU-3d. Monitoring Program:** EPNG would implement a comprehensive monitoring program to ensure protection of archaeological sites within and adjacent to the APE. EPNG would monitor construction activities within 200 feet of the 17 sites with intact cultural resources adjacent to the APE.	Entire alignment Entire alignment Entire alignment
CU-4	**Impacts on Known Cultural Resources during Maintenance Activities:** Maintenance activities conducted along the pipeline ROW have the potential to adversely affect known cultural resources.	**II**	**CU-4. Review of Survey Reports:** Prior to maintenance activities, EPNG would review survey reports to confirm that maintenance activities would not affect NRHP-eligible sites. If required maintenance cannot avoid a site, EPNG would initiate consultation with the BLM archaeologist and SHPO, and follow any recommended mitigation measures.	Entire alignment

Impact Number	Impact	Impact Class[1]	Recommended Mitigation Measures	Location
Section 4.12 Land Use and Planning				
LU-1	**Temporary Disturbance to Residences.** Residential properties may be directly affected by trenching, landscape removal, and restricted access during construction activities.	**II**	**LU-1a. Restore Property:** EPNG would immediately repair or replace damaged property, such as landscaping, driveways, fencing, and other property, following construction activities. **LU-1b. Secure Trench Area:** EPNG would install safety fencing around construction areas within 500 feet of residences and backfill or cover open trenches at the end of each workday.' **LU-1c. Maintain Access:** EPNG would work with individual residents to maintain access to properties.	MP 24.7, MP 29.5, MP 32.36, MP 40.2, MP 43.1 MP 24.7, MP 29.5, MP 32.36, MP 40.2, MP 43.1
LU-2	**Permanent Conversion of Residential Land.** Approximately half of an acre of residential land would be permanently converted to industrial.	**II**	**LU-2. Compensate Land Owner:** EPNG would negotiate with the landowner at MP 33.36 to determine fair compensation for the land.	MP 33.36
LU-3	**Future Residential Impact:** Smart pigging, hydrostatic testing, repair, and maintenance work are ongoing Project related activities that may disturb residences that are developed within 50-feet of	**III**	**LU-3. Site-Specific Mitigation Plans:** EPNG would prepare site-specific residential construction mitigation plans for all residences within 50-feet of construction activities.	Residences within 50-feet of the ROW or construction areas.

Impact Number	Impact	Impact Class[1]	Recommended Mitigation Measures	Location
	Line 1903 in the future.			
Section 4.14 Recreation				
REC-1	**Noise Effects on Wilderness Areas:** Noise from construction activities would be perceptible in Cadiz, Old Woman and Palen/McCoy Wilderness areas.	**II**	**REC-1. Construction Schedule:** EPNG would coordinate with BLM to identify low-visitor use periods and schedule construction activities accordingly. EPNG would limit construction activities to weekdays in the vicinity of the wilderness areas to minimize disturbance during peak use periods.	MP 222.5-293
REC-2	**Potential to Temporarily Increase Off-road Vehicle Use:** Construction activities in the desert areas could result in an increase of cross-country offroad vehicle use.	**II**	**REC-2. Restrict Use:** EPNG would restrict vehicle use during construction to its existing ROW, access roads, or patrol roads that parellel the ROW. ROW negotiations with Tejon Ranch would stipulate either hunting restrictions during construction or construction restrictions during hunting seasons.	Entire alignment

Notes:

[1]Only Class I and Class II impacts are included in table.

Impact Class
I = Significant adverse impact that remains significant after mitigation.
II = Significant adverse impact that can be eliminated or reduced below an issue's significance criteria.
III = Adverse impact that does not meet or exceed an issue's significance criteria.
IV = Beneficial impact.

The environmental effects of constructing and operating the Project are summarized below.

Biological Resources

The Project is co-located with other pipelines for much of its length in an established and previously disturbed corridor. In its approximately 304-mile span from Wheeler Ridge, California to Ehrenberg, Arizona, Line 1903 traverses various types of habitat including annual grassland; sagebrush; creosote; saltbrush; tamarisk; and willow scrub; Joshua Tree woodland; desert dry wash woodland; cultivated cropland; residential land; and previously disturbed ROW. Additionally, one riparian area and one non-jurisdictional seasonal wetland are located in Project construction areas.

Based on literature reviews and field surveys, it was determined that 17 special-status plant species could occur in the Project area. Subsequent protocol-level rare plant surveys identified no special-status species in the Project area. One species, white margined beardtongue, was found adjacent to the Project ROW, where no construction activities are planned. Literature searches and field surveys also revealed 66 special-status wildlife species that could potentially occur in the Project area. These species include one invertebrate, two fish, seven reptiles, 35 birds, and 20 mammals.

Construction of the Project, including the Cadiz Lateral, would temporarily disturb approximately 217.12 acres of land. Undisturbed vegetation occupies approximately 79.78 of those acres. The total acreage of vegetation and wildlife habitat that would be permanently lost due to construction of above-ground facilities is 8.05 acres. Construction of the Cadiz Lateral would require permanent maintenance of 39.02 acres of permanent ROW. Of these lands, 4.77 acres are currently undisturbed. Table ES-1 summarizes the potential impacts on biological resources in the Project area. It also describes proposed avoidance and mitigation measures to alleviate these impacts. Impacts are associated with disturbance related to construction activities, as well as regular maintenance activities during operation that could disturb native vegetation and habitat. All impacts can be mitigated to a less-than-significant level, except for potential impacts to the blunt-nosed leopard lizard, which have the potential to be located from MP 14 to MP 22.5. Impacts on this species are Class I impacts, significant after mitigation.

Other projects planned in the vicinity of the proposed Project could potentially increase stress on wildlife and disturb additional vegetation and habitat present near the

proposed Project. Project activities proposed in the vicinity of other major construction projects are minor and would not substantially add to other effects; consequently, cumulative impacts on biological resources would be less than significant.

Geology and Soils

The proposed Project is located in three physiographic provinces of California and Arizona: the Central Valley, Sierra Nevada Mountains, and the Mojave Desert. The Project crosses five State-defined earthquake fault zones or active fault areas, as well as several other faulted areas that have segments with evidence of surface rupture. A geohazard assessment of Line 1903 prepared for EPNG identified two faults crossed by the Project with a displacement capacity sufficient to damage the integrity of the existing pipeline during a significant seismic event. These are the Garlock and Calico Faults, located at MP 44 and MP 142, respectively. The wall thickness of the pipeline was increased to a protective level for these segments. As outlined in Table ES-1, engineering design and post-earthquake inspections can reduce the potential impact of a seismic event at these faults to a less than significant level. All components of the Project have been designed to withstand ground shaking or soil liquefaction that could result from seismic events on these faults or the nearby San Andreas Fault. A geohazard assessment is currently being done of the Cadiz interconnect and lateral. The results of this study and any potential impacts associated with these results would be analyzed prior to approval of the Project.

Construction activities associated with the Project could cause erosion and compaction of soils, as well as mixing of topsoil. These potential impacts would be addressed by implementation of the Applicant-prepared UECRM Plan.

Some construction locations proposed for the Project have a high probability for exposure of paleontological resources. Direct impacts on these resources could result from grading and trenching. Indirect impacts could result from erosion and unauthorized collection. Mitigation measures outlined in Table ES-1 would limit potential impacts on paleontological resources through avoidance and scientific excavation.

Hydrology and Water Quality

Due to the arid climate of the region, surface water resources in the Project area are generally scarce. The Project pipeline crosses small intermittent streams or washes; the Mojave River, which is also intermittent; and the Colorado River, a perennial waterbody. No construction activities are planned in any perennial waterbodies, including the Colorado River. Construction in intermittent waterbodies would be avoided during periods of high flow, and weather conditions would be monitored during construction to avoid activity during runoff events. EPNG has also developed a SPCC Plan to avoid contamination of Project areas. Any impacts on these waterbodies would be temporary and less than significant. Hydrostatic test water would be obtained from Brite Lake and Palo Verde Water District irrigation canals from the Colorado River. The hydrostatic test water would be discharged into evaporation ponds. As applicable, local, State, and Federal rules would regulate these activities. No significant impacts on these surface waters are expected to result from the Project.

It is possible that private irrigation or drinking water wells exist near Project construction areas. If the Project negatively affected the yield or quality of water in these wells, such impacts could be compounded if construction or operation of other projects planned in the Project vicinity simultaneously affected groundwater resources. The only known well within 200 feet of the construction ROW for the Project is a groundwater irrigation well that is within 150 feet of the proposed evaporation pond at MP 33.05. Potential impacts caused by the Project to this and any other groundwater resources would be temporary. If the applicant complies with mitigation proposed in Table ES-1, including contacting all landowners concerning locations of private wells, any impacts on groundwater resources would be less than significant.

Hazards and Public Safety

The transportation of natural gas by pipeline involves some risk to the public in the event of an accident and subsequent release of gas. The greatest potential hazard is an explosion or fire following a major rupture in the pipeline. Methane, the primary component of natural gas, is not toxic but does pose a slight inhalation hazard as well. Releases of natural gas can be caused by corrosion, material defects, rupture by equipment outside the pipeline, earth movement, and weather. From 1984 to 2001, gas transmission and gathering lines were the cause of, on average, 3.1 deaths nationwide per year, which is very low for the 311,000 miles of these pipelines in service.

The Project pipelines and aboveground facilities would be designed, constructed, operated, and maintained in accordance with or exceeding US Department of Transportation (USDOT) Federal Safety Standards. These regulations are intended to protect the public and to prevent natural gas facility accidents and failures. They include specifications for material selection and project design based partially on the human population density near a proposed project. Areas are designated as Class 1 to 4, depending on the population density in the vicinity of the Project—with Class 1 being the lowest density and Class 4 the highest.

All but five percent of Line 1903 crosses sparsely populated Class 1 areas. There is one mile of Class 3 locations and 14 miles of Class 2 locations. All Class 2 and 3 areas are west of the Mojave/Kern Common Facilities at Daggett (MP 132.1). Using the C-FER analysis model developed for the US Environmental Protection Agency, the worst-case impact area of Line 1903 east of Daggett was calculated to be 630 to 675 feet. The impact area west of Daggett was calculated to be 525 feet. This difference in impact areas is due to different MAOPs on Line 1903 west and east of Daggett. Approximately 536 buildings, including residences, are within the potential impact area of Line 1903. Of these buildings, 494 are west of Daggett, and 42 buildings are east of Daggett. No buildings are within 1,000 feet of the Cadiz Lateral or interconnect.

In conformance with USDOT standards and other regulations, and sometimes exceeding them, EPNG proposes a number of measures to prevent accidents to Project facilities and to minimize the risk of releases of natural gas. These measures include pipeline inspections prior to construction, post-construction smart pig surveys, an upgraded cathodic protection system, clearly marking the pipeline facilities, regular inspections of the pipeline by plane or helicopter, relief valves, automatic shutdown valves, emergency response plans, employee training programs, and public education programs about the risks of the Project and emergency procedures.

The probability of a high-consequence release of natural gas is very low during the operation of Line 1903, but such a release could occur. The concern is greatest in the more highly populated Class 2 and Class 3 locations. While measures outlined in Table ES-1 are proposed to mitigate potential impacts on the public, the potential impacts on public safety from gas line rupture and release of natural gas are significant after mitigation in these more populous areas (Class I impact). Additionally, there is a potential for Class I cumulative public safety impacts associated with several natural gas pipelines located within the potential impact area of Line 1903.

Construction and operation of the Project could also potentially result in contamination of soils from accidental spills or exposure of already contaminated soils. Implementation of measures in the SPCC Plan and Contaminated Soils Plan prepared by EPNG would reduce any potential impacts associated with contaminated soils to less-than-significant levels.

Cultural Resources

Cultural resources within the construction ROW of the Project have been identified by several methods, including record searches, pedestrian surveys, and subsequent validation surveys. Surveys conducted in 2000, 2001, and 2002 resulted in recording and/or updating 124 cultural resources within the Project area of Line 1903, 97 of which are archaeological sites and 27 of which are isolated sites. Surveys in 2004 in the vicinity of the Cadiz Lateral resulted in relocating three previously recorded historic sites and recording five newly discovered sites. No prehistoric sites were observed.

Ground-disturbing activities for Line 1903 and the Cadiz Lateral are planned at or adjacent to 34 cultural resource sites, 13 of which are not eligible for listing in the National Register of Historic Places. These sites include prehistoric lithic scatters, historic trash scatters, historic villages, towns, and camps, railroad grades, historic mining prospects, and historic roads. While the Project does not cross tribal lands, Native American tribes have been consulted regarding identification of cultural values, religious beliefs, and traditional practices that may be affected by actions associated with the Project.

Potential impacts on these cultural resources could occur during construction and operation directly by ground-disturbing activities, or indirectly through ground surface activities and increased human presence near sensitive sites. As outlined in Table ES-1, several mitigation measures, including monitoring, avoidance, and worker awareness, are recommended to reduce these potential impacts to less-than-significant levels. Similarly, cultural resources may be discovered during construction activities. It is recommended, therefore, that the applicant develop an Unanticipated Discovery Plan. Additionally, the Applicant must complete consultations with Native Americans concerning potential impacts to cultural resources.

Environmental Justice

As discussed in Section 4.6, Hazards and Public Safety, construction and operation of the Project has the potential to affect minority and low-income populations within an impact area of 525 to 675 feet of the pipeline, depending on the location on the pipeline. This potential impact area encompasses construction-related impacts on populations near the pipeline and is also the distance at which members of the public have a potential to be affected in the unlikely event of a rupture on the natural gas pipeline.

Evaluations of minority and low-income populations affected by the Project were based on US Bureau of Census, Census 2000 data. The Project would traverse San Bernardino, Kern, Riverside, and La Paz Counties. The potential impact area of the Project crosses 21 census tracts in these counties. Potential environmental justice areas of concern within the potential Project impact area were identified by comparing average minority or low-income population percentages within tracts in the potential Project impact area to threshold values. These threshold values were calculated by multiplying the county average in which the tract is located by 1.2. Tracts with significant minority or low-income populations were then further evaluated to determine whether residences or other buildings exist within the impact area of the Project in these tracts.

A rupture of Line 1903 could potentially affect 536 residences located adjacent to the Project. None of these residences are in tracts or block groups with significant minority populations. Twelve of the 536 residences (2.2 percent) are located in block groups with significant low-income populations. This represents a relatively small portion of residences potentially impacted by the Project.

Additionally, the majority of Line 1903 and all of the Cadiz Lateral is located in rangeland and rural areas of very low population density. Section 4.6, Hazards and Public Safety, describes the DOT class designations within the Project impact area. These class designation are based on population density, with 1 the least dense and Class 4 the most dense. As described in Section 4.6, Hazards and Public Safety, Line 1903 and the Cadiz Lateral are located in all Class 1 areas, with the exception of five Class 2 areas and one Class 3 area. No significant minority or low-income communities are located within the impact area of the Project in Class 2 and 3 areas. All significant low-income communities potentially impacted by the Project are located in low-density Class 1 areas. Minority and low-income communities within the potential impact area of

the Project would not be disproportionately impacted by a potential upset or explosion on Line 1903 or the Cadiz Lateral.

Community Compatibility

The Project would generally be compatible with community resources such as agriculture, population, housing, tourism, public infrastructure, traffic and transportation, noise, air quality, land use and planning, and aesthetic or visual resources. Some significant impacts could occur related to traffic levels, air quality, recreation, land use, and agricultural resources if not properly mitigated. These concerns are discussed below separately.

The Project crosses lands owned by Federal, State, and county agencies and private parties. Of the 217.12 acres of land affected by construction of the pipeline facilities, about 47.07 would be retained as new permanent right-of-way and aboveground facilities. Of the 47.07 acres permanently retained, 38.68 acres are rangeland, 6.84 acres are utility land, 1.49 acres are agriculture, and 0.06 acres are residential.

Although not anticipated as part of construction, regular pipeline inspections could lead to subsequent construction activities that could disrupt residences within 50 feet of construction activity from increased noise, increased dust, decreased air quality, odors, loss of vegetation, access issues, and safety issues concerning open trenches. Residential Construction Plans recommended as mitigation for these concerns would reduce potential impacts to a less-than-significant level. Cultivated cropland (approximately 14.7 acres) in the construction ROW of the Project could be disturbed by construction activities. It is recommended that EPNG consult with property owners and tenant farmers to minimize impacts on farming operations and, if necessary, to compensate landowners and farmers for loss of income from land taken out of production due to pipeline construction.

Project-related construction activities could exceed significance thresholds established by the Mojave Desert Air Quality Management District (MDAQMD). Specifically, Project construction could result in emissions that exceed the daily significance thresholds for nitrogen oxides (NO_x), carbon monoxide (CO), and particulate matter. Air pollutants from construction equipment would be limited to the immediate vicinity of the Project area, however, and construction-related emissions would be short term. Impacts on air

quality, therefore, would be limited. Implementation of mitigation measures outlined in Table ES-1 would reduce this impact to a less-than-significant level.

Six road crossings would need to be replaced in order to meet USDOT standards. Two types of replacement would be considered at each site by EPNG. Either the existing pipe segment would be removed and replaced, or the existing pipe would be capped and left in place and an adjacent trench or bore would be installed. Trenching across the roads would require either temporary lane closure or temporary closure of the road, which would disrupt the flow of traffic along these roads. It is recommended that EPNG develop Traffic Control Plans 60 days prior to construction for each of the road crossings where trenching of roadways is proposed. This impact would be less than significant after mitigation.

ES.1.5 COMPARISON OF PROPOSED PROJECT AND ALTERNATIVES

The CEQA Guidelines (Section 15126.6 [d]) require that an EIR include sufficient information about each alternative to allow meaningful evaluation, analysis, and comparison with the proposed Project. A matrix displaying the major characteristics and significant environmental effects of each alternative may be used to summarize the comparison. Table ES-2 provides a comparison of the proposed Project with each of the alternatives evaluated in this document, including the No Project Alternative.

ES.1.6 ENVIRONMENTALLY SUPERIOR ALTERNATIVE

The State CEQA Guidelines [Section 15126.6(d)] require that an EIR include sufficient information about each alternative to allow meaningful evaluation, analysis, and comparison with the proposed Project. The Guidelines (Section 15126.6 [e][2]) further state, in part, that "*If the environmentally superior alternative is the "No Project" alternative*, the EIR would also identify an environmentally superior alternative among the other alternatives".

Table ES.2 summarizes the environmental impacts for the proposed Project and alternatives. The No Project alternative does not include any Class I or Class II impacts. Therefore, the No Project alternative is the environmentally superior alternative.

Among the other alternatives, the Ehrenberg to Cadiz Alternative avoids the Class I biological impacts, and the Class I public safety impacts of the proposed Project. The Ehrenberg to Cadiz to Alternative converts 88 miles of pipeline, compared to 171 miles of pipeline with the Ehrenberg to Daggett Alternative.The avoidance of Class I impacts of the proposed Project, and the shorter section of pipeline conversion, results in the Ehrenberg to Cadiz Alternative being environmentally superior.

Table ES-2. Summary of Potentially Significant Environmental Impacts for Proposed Project and Alternatives

Impact No.	Impact Description	Proposed Project	No Project	Alternative 1 Ehrenberg to Daggett	Alternative 2 Ehrenberg to Cadiz
Section 4.2 Biological Resources					
BIO-1	Temporary Disturbance of Wetlands	II	III	II	III
BIO-2	Spread of Noxious Weeds	II	III	II	II
BIO-3	Impacts on the San Emigdio Blue Butterfly	II	III	III	III
BIO-4	Impacts on the Blunt-nosed Leopard Lizard	I	III	III	III
BIO-5	Impacts on the Desert Tortoise	II	III	II	II
BIO-6	Impacts on Other Special-status Amphibian and Reptile Species	II	III	II	II
BIO-7	Impacts on the San Joaquin Kit Fox	II	III	III	III
BIO-8	Impacts on the Tipton Kangaroo Rat	II	III	III	III
BIO-9	Impacts on the Mohave Ground Squirrel	II	III	II	III
BIO-10	Impacts on Other Special-status Mammalian Species	II	III	II	II
BIO-11	Impacts on Federally or State-listed Birds of Riparian Habitats	II	III	II	II
BIO-12	Impacts on Special-status Raptor Species and their Nesting Habitat	II	III	II	II
BIO-13	Impacts on Habitat for Other Special-status Bird Species	II	III	II	II
BIO-14	Impacts on Federally or State-listed Plant Species	II	III	II	II
BIO-15	Impacts on Other Special-status Plant Species	II	III	II	II
BIO-16	Mortality to Desert Succulent Species	II	III	II	II

Impact No.	Impact Description	Proposed Project	No Project	Alternative 1 Ehrenberg to Daggett	Alternative 2 Ehrenberg to Cadiz
Section 4.3	**Agricultural Resources**				
AGR-1	Temporary Loss of Rangelands or Income	II	III	II	II
AGR-2	Temporary Loss of Agricultural Land or Income	II	III	II	II
AGR-3	Interruption of Irrigation	II	III	II	II
AGR-4	Permanent Loss of Agricultural Land or Income	II	III	II	II
Section 4.4	**Geology and Soils**				
GEO-1	Seismic-Induced Damage	II	III	II	II
GEO-2	Exposure of Paleontological Resources	II	III	II	II
Section 4.5	**Hydrology and Water Quality**				
WQ-1	Impacts on Private and Public Water Supplies	II	III	II	II
Section 4.6	**Hazards and Public Safety**				
HAZ-1	Gas Line Rupture and Release of Natural Gas	I	III	II	II
Section 4.7	**Air Quality**				
AIR-1	Construction Emissions	II	III	II	II
Section 4.8	**Traffic and Transportation**				
TR-1	Disruption of Traffic Flow at Road Crossings	II	III	II	II
Section 4.9	**Noise**				
NOI-1	Disturb Residences within 500 feet of the ROW	II	III	II	II
Section 4.10	**Cultural Resources**				
CU-1	Unanticipated Discovery of Cultural Resources and Human Remains	II	III	II	II
CU-2	Indirect Impacts on Cultural Resources during Construction	II	III	II	II

Impact No.	Impact Description	Proposed Project	No Project	Alternative 1 Ehrenberg to Daggett	Alternative 2 Ehrenberg to Cadiz
CU-3	Recorded Archaeological Sites Adjacent to the Project APE	II	III	II	II
CU-4	Impacts on Known Cultural Resources during Maintenance Activities	II	III	II	II
Section 4.12 Land Use and Planning					
LU-1	Temporary Disturbance to Residences.	II	III	II	II
LU-2	Permanent Conversion of Residential Land.	II	III	III	III
LU-3	Future Residential Impacts.	II	III	II	II
Section 4.14 Recreation					
REC-1	Noise Effects on Wilderness Areas	II	III	II	II
REC-2	Increase Off-road Vehicle Use	II	III	II	II

Notes:

Class I: Significant adverse impact that remains significant after mitigation.
Class II: Significant adverse impact that can be eliminated or reduced below an issue's significance criteria.
Class III: Adverse impact that does not meet or exceed an issue's significance criteria.
Class IV: Beneficial impact.

ES.1.7 KNOWN AREAS OF CONTROVERSY OR UNRESOLVED ISSUES

The comments received during the agency and public scoping period raised issues related to geologic hazards, hazardous materials, vegetation, wildlife, special-status species, land use, traffic, and pipeline safety. Appendix B provides copies of letters received during scoping, and indicates the section of the EIR/EA in which the issue is addressed.